

Please replace the paragraph beginning on line 10, at page 40 with the following:

A 39
--- U.S. Patent Application Serial No. 09/223,317 (Attorney Docket No. 03493.77825; Client Reference No. Chow 11-41-2-8), entitled "Method for Billing Subscribers With Neighborhood Cordless Residential Service," invented by Chow et al.--

Please replace the paragraph beginning on line 13, at page 40 with the following:

A 39
--- U.S. Patent Application Serial No. 09/223,316 (Attorney Docket No. 03493.77826; Client Reference No. Chow 6-1-3-3), entitled "Neighborhood Residential Cordless Service Call Handoff With Call Barging," invented by Chow et al.--

IN THE CLAIMS:

QHD Cmt
Please cancel claims 1-15, and replace with newly added claims 16-60:

--16. (New) A network architecture for providing a local cordless-type service, comprising:

a plurality of wireless telephone terminals having a directory number (DN) coupled by respective bearer channels to a line side of a digital telecommunications switch, said bearer channel assigned from a pool of available radio frequencies over which one of said plurality of wireless telephone terminals sends and receives radio frequency signals;

at least one intelligent base station (IBS) for receiving radio frequency signals from said plurality of cordless telephone terminals; and

said digital telecommunications switch coupled to said IBS, said digital telecommunications switch providing a bearer channel line interface to said IBS, said digital telecommunications terminal further providing a trunk side interface to a public switched telecommunications network.

17. (New) The architecture according to claim 16, further comprising a remote digital terminal (RDT) coupled to a plurality of IBSs for providing bearer channel interfaces between each of said plurality of IBSs and said digital telecommunications switch.

18. (New) The architecture according to claim 17, further comprising a basic rate interface (BRI) bearer channel between each IBS and said RDT.

19. (New) The architecture according to claim 18, wherein, in event of first and second simultaneously pending telecommunications calls being handled by said IBS, said IBS processes said telecommunications calls via said BRI bearer channel.

20. (New) The architecture according to claim 18, wherein said RDT acts as a concentrator for radio frequency signals sent from said plurality of wireless telephone terminals over said bearer channel.

21. (New) The architecture according to claim 20, wherein said RDT communicates with said digital telecommunication switch using a GR-303 standard interface.

22. (New) The architecture according to claim 16, wherein said IBS communicates directly with said digital telecommunications switch using an Integrate Service Digital Network (ISDN) basic rate interface (BRI) link.

23. (New) The architecture according to claim 16, wherein said digital telecommunications switch interfaces with a mobile switching center over trunk lines.

24. (New) The architecture according to claim 16, wherein each wireless telephone terminals is assigned to interact with one of a plurality of DNs.

25. (New) The architecture according to claim 24, wherein said DNs are in different neighborhood zones.

26. (New) The architecture according to claim 25, wherein said neighborhood zones are adjacent.

27. (New) The architecture according to claim 25, wherein said neighborhood zones are non-adjacent.

28. (New) The architecture according to claim 16, wherein one of said wireless telephone terminals is removed from a neighborhood zone where a telecommunications call was initiated, said telecommunications call being handed off to another IBS.

29. (New) A method for providing local cordless-type service, comprising the steps of:

initiating, by a subscriber, a telecommunications call in a neighborhood zone for which said subscriber has selected said local cordless-type service;

assigning at least one directory number (DN) to each of a plurality of wireless telephone terminals for which said local cordless-type service has been initiated;

assigning, by an intelligent base station (IBS), a bearer channel from a pool of available radio frequencies to said telecommunications call initiated by said subscriber using one of said plurality of wireless telephone terminals; and

processing, by said IBS, of said telecommunications call via a digital telecommunications switch in communication with a public switched telecommunications network (PSTN), said digital telecommunications switch providing a bearer channel line interface to said IBS, said digital telecommunications switch further providing a trunk side interface to said PSTN.

30. (New) The method according to claim 29, wherein a remote digital terminal (RDT), coupled to a plurality of IBSs provides bearer channel interfaces between each of said IBSs and said digital telecommunications switch.

31. (New) The method according to claim 30, further comprising the step of providing an ISDN rate interface (BRI) bearer channel between each IBS and said RDT.

32. (New) The method according to claim 29, further comprising the step of processing, by said IBS via said ISDN/BRI bearer channel, simultaneously pending telecommunications calls.

33. (New) The method according to claim 29, wherein said RDT functions as a concentrator for radio frequency signals sent from said plurality of IBSs over said ISDN/BRI bearer channel and subtending bearer channels.

34. (New) The method according to claim 33, further comprising the step of communicating between said RDT and said digital telecommunications switch using a GR-303 standard.

35. (New) The method according to claim 29, wherein said IBS communicates directly with said digital telecommunications switch using an Integrated Services Digital Network (ISDN) basic rate interface (BRI) link.

36. (New) The method according to claim 29, further comprising the step of interfacing over trunk lines by said digital telecommunications switch with a mobile switching center (MSC).

37. (New) The method according to claim 29, further comprising the step of assigning each wireless telephone terminal a plurality of DNs as said wireless telephone terminal moves from one neighborhood zone to another neighborhood zone.

38. (New) The method according to claim 29, further comprising the step of handing off said telecommunications call to another IBS, if said subscriber using one of said plurality of wireless telephone terminals is removed from said neighborhood zone where said telecommunications call was initiated.

39. (New) A network architecture for providing local cordless-type service, comprising:

means for initiating, by a subscriber, a telecommunications call in a neighborhood zone for which said subscriber has selected said local cordless-type service;

means for assigning at least one directory number (DN) to each of a plurality of wireless telephone terminals for which said local cordless-type service has been initiated;

means for assigning, by an intelligent base station (IBS), a bearer channel from a pool of available radio frequencies to said telecommunications call initiated by said subscriber using one of said plurality of wireless telephone terminals; and

means for processing, by said IBS, of said telecommunications call via a digital telecommunications switch in communication with a public switched telecommunications network (PSTN), said digital telecommunications switch providing a bearer channel line interface to said IBS, said digital telecommunications switch further providing a trunk side interface to said PSTN.

40. (New) A network architecture for providing a local cordless-type service, comprising:

a plurality of mobile stations (MSs), each MS in a neighborhood zone will associate with a wired network directory number (DN) assigned to an IBS;

a bearer channel assigned from a pool of available radio frequencies, administered by RF management processes between an network server platform (NSP) and said IBS via said LDS transparently, over which one of said plurality of cordless telephone terminals and mobile stations sends and receives radio frequency signals;

at least one intelligent base station (IBS) for receiving radio frequency signals from said plurality of MSs; and

a local digital switch (LDS) coupled to said IBS, said LDS providing a bearer channel line interface to said IBS, said LDS further providing a trunk-side interface to one of a public switched telecommunications system (PSTN) and a public cellular/PCS network.

41. (New) The network architecture according to claim 40, further comprising a first remote digital terminal (RDT) coupled to a plurality of IBSs for providing bearer channel interfaces between each of said plurality of IBSs and said LDS.

42. (New) The network architecture according to claim 41, further comprising at least one basic rate interface (BRI) bearer channel between each IBS and said first RDT.

43. (New) The network architecture according to claim 42, wherein, in the event of first and second simultaneously pending telecommunications calls being handled by said IBS via said LDS, said MS and said NSP.

44. (New) The network architecture according to claim 40, further comprising a second RDT, said first RDT provides an interface to said second RDT, said second RDT provides an interface between said first RDT and said LDS, said first RDT acts as a concentrator for radio frequency signals sent from said plurality of mobile stations over said bearer channel.

45. (New) The network architecture according to claim 44, wherein said first RDT and said second RDT communicate using GR-303 standard.

46. (New) The network architecture according to claim 40, wherein said LDS is capable of interfacing with a mobile switching center (MSC) over trunk lines.

47. (New) The network architecture according to claim 40, wherein each IBS can be assigned a plurality of DNs.

48. (New) The network architecture according to claim 47, wherein said MS moves to another neighborhood zone, said IBS behaves like a proxy to associate one of said plurality of DNs with said MS.

49. (New) The network architecture according to claim 48, wherein said neighborhood zones are adjacent.

50. (New) The network architecture according to claim 48, wherein said neighborhood zones are non-adjacent.

51. (New) The network architecture according to claim 40, wherein one of said cordless telephone terminals and mobile stations is removed from a neighborhood zone where a telecommunications call was initiated, said telecommunications call being handed off to another IBS.

52. (New) A method for providing local cordless-type service, comprising the steps of:

associating a directory number (DN) assigned to an intelligent base station (IBS) with each of a plurality of mobile stations for which said local cordless-type service has been initiated;

initiating, by a subscriber, a telecommunications call in a neighborhood zone for which said subscriber has selected said local cordless-type service;

assigning, by said IBS, a bearer channel from a pool of available radio frequencies to said telecommunications call initiated by said subscriber using one of said plurality of mobile stations; and

processing, by said IBS, of said telecommunications call via a local digital switch (LDS) in communication with one of a public switched telecommunications network (PSTN) and a public cellular/PCS network, said LDS providing a bearer channel line interface to said IBS, said LDS further providing a trunk-side interface to one of said PSTN and said public cellular/PCS network.

53. (New) The method according to claim 52, wherein a first remote digital terminal (RDT), coupled to a plurality of IBSs provides bearer channel interfaces between each of said IBSs and said LDS.

54. (New) The method according to claim 53, further comprising the step of providing at least one basic rate interface (BRI) bearer channel between each IBS and said first RDT.

55. (New) The method according to claim 52, further comprising the step of processing, by said IBS via said ISDN-BRI bearer channel simultaneously pending telecommunications calls.

56. (New) The method according to claim 53, wherein a second RDT provides an interface between said first RDT and said LDS, said first RDT functions as a concentrator for radio frequency signals sent from said plurality of IBSs over said ISDN-BRI bearer channel.

57. (New) The method according to claim 56, further comprising the step of communicating between said first RDT and said second RDT using a GR-303 standard.

58. (New) The method according to claim 52, further comprising the step of interfacing over trunk lines by said LDS with a mobile switching center (MSC).

59. (New) The method according to claim 52, further comprising the step of handing off said telecommunications call to another IBS, if said subscriber using one of said plurality of mobile stations, is removed from said neighborhood zone where said telecommunications call was initiated.

60. (New) A network architecture for providing local cordless-type service, comprising:

means for associating a directory number (DN) assigned to an IBS to each of a plurality of mobile stations for which said local cordless-type service has been initiated;

means for initiating, by a subscriber, a telecommunications call in a neighborhood zone for which said subscriber has selected said local cordless-type service;

means for assigning a bearer channel from a pool of available radio frequencies to said telecommunications call initiated by said subscriber using one of said plurality of mobile stations; and

means for processing of said telecommunications call via communication with one of a public switched telecommunications network (PSTN) and a public cellular/PCS network.--